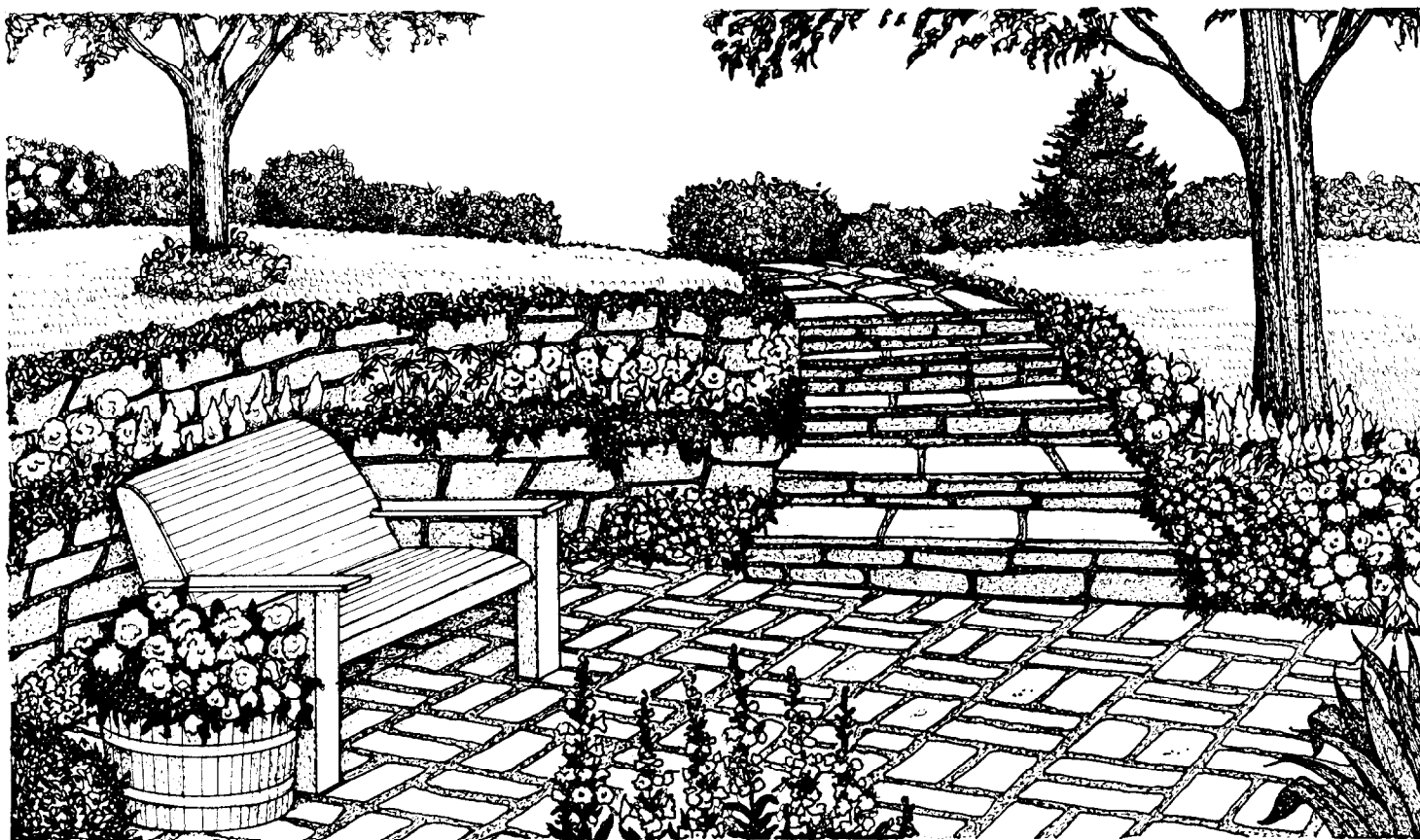


SOUND GARDENING

Gardening With an Eye on Water Quality

LANDSCAPING



Development of open land and woods has increased the area covered by buildings, paved surfaces and turf. This kind of development changes Long Island Sound's watershed, causing increased runoff that carries more contaminants and occurs more rapidly after a storm. Storm sewers carry most runoff untreated into surface or groundwaters. Gardeners can help alleviate the runoff problems by reducing the volume of water leaving their property.

Observe **the Water Flow**

Start by watching the pattern of water flow on and around the garden and lawn. Does overflow run off in a heavy rain, carrying soil with it and exposing plant roots? Does the water penetrate to plant roots when watering or does it run uselessly down the sidewalk, driveway or alley and into the storm drains?

Making Landscape Choices

Your landscape choices can improve the beauty of the garden and the water quality of streams, rivers, the Sound, the ocean and

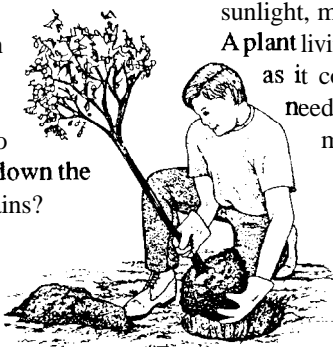
groundwater. Properly selected plants or landscaping features can reduce runoff and minimize the amount of pesticides and fertilizers applied to lawns and gardens. Plant selection, turf areas, types of walks and decks, and control of water infiltration and flow affect water quality in the Sound.

Plant Selection

All plants have their own special requirements in terms of sunlight, moisture, temperature range, soil type and fertility needs. A plant living in less than optimum conditions will not be as healthy as it could be under ideal conditions. Selecting plants with needs that match what the site can provide will minimize maintenance, enhance plant health and reduce the need for fertilizers and pesticides.

Turf Choices

Turf can remain an integral part of the landscape without being a heavy user of water, fertilizer and pesticides. Good quality turf *can* be maintained with limited use of chemicals. When a new lawn or



All non-biodegradable covering and nylon twine must be removed before planting.

renovation is planned, select **turfgrass** types and varieties that **are** low maintenance and disease-resistant. Your local Cooperative Extension staff can provide you with a list.

It is not wise to grow grass:

- in dense shade with shallow tree roots
- where maintenance is **difficult** (under low branches, on steep hillsides. etc.)
- where intensive traffic tramples all vegetation and compacts the soil.

The *Sound Gardening* strategy to landscaping is to plant low maintenance, disease-resistant species and varieties and follow xeriscaping principles (planned drought-resistant landscapes).

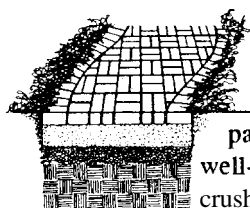
If you decide to reduce the area devoted to lawns, use ground covers such as English ivy or Pachysandra. shrubbery borders and trees. These types of plants help to:

- give an increased sense of space
- reduce home heating and cooling costs by blocking the cold winds of winter and providing shade in the summer
- encourage birds, many of which are natural predators of bothersome insects, by providing nesting sites and creating wildlife habitat
- reduce the use of chemicals: properly selected **and** planted woody plants generally require less chemical applications
- reduce the amount of water needed
- allow for more time to enjoy the garden as less time must be spent maintaining it.

Selecting Walkways

Concrete and asphalt seal the land, eliminating infiltration and causing runoff in areas that could otherwise soak up the water. Following are some paving surfaces that can offer permeability as well as durability.

Modular Pavers



In moderate traffic areas where **turfgrass** is desired, **modular pavers** can be used. This category includes stone, brick and lattice paving blocks. They can be used on any well-drained soils and must be placed on a base of crushed stone or sand. To further camouflage these

blocks, soil can be placed in open spaces between bricks and grass seeds sown. Maintenance is similar to the rest of the lawn.

Wood Decking

A low deck, with a 2" x 6" board surface, serves as an attractive and functional ground surface. Heights can vary to make a yard more interesting and to suit the terrain. Properly designed decking constructed with appropriate material (either cedar, redwood or treated wood) will last a long time. Spaces between the boards allow for the easy infiltration of rainwater. Decks generally shade out most weed growth. Pea gravel. 1/2" to 3/4", 2" to 3" deep. will allow for infiltration of water and reduce erosion under the deck.

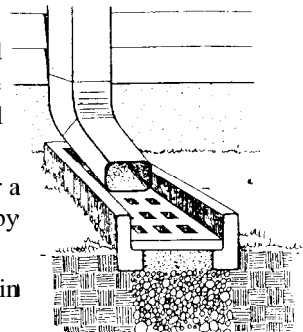
Stone or Gravel

These can make an attractive surface. Be sure to use porous sheeting underneath to help stabilize gravel and to control weeds while permitting water infiltration.

Controlling Runoff

Think about the ultimate destination of rainwater. Runoff from roofs and paved surfaces can be deflected onto and spread over well-drained soil where infiltration will occur. Encourage retention and infiltration of runoff by:

- using gravel or modular pavers installed in low lying areas where runoff may be detained, allowing it to infiltrate the soil more efficiently
- using gravel seepage pits, a **dutch drain** or a series of infiltration beds underlain by either a gravel or tile drainage system
- using gravel trenches or **french** or curtain drains along driveways and pathways
- terracing
- directing runoff across vegetated surfaces -- reseeding bare patches in the lawn as soon as possible.



Dutch Drain

REMEMBER

- * Design the yard to suit your needs and protect water quality.
- * High quality **turfgrass** can be maintained using limited chemical inputs.
- * Keep rainfall and irrigation water on your yard.
- * Use permeable paving materials wherever possible.
- * Choose **xeric/low** water use plants.

For more information on *Sound Gardening* and erosion, contact your local Cooperative Extension office.

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Storrs: (203)486-3435 Litchfield: (203)567-9447
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